Application No.: 09/939,628 Docket No.: 21482-00069-US

REMARKS

Claims 1 and 2 remain pending in this application. Claim 1 is independent. No claims have been amended, added, or canceled by this Response.

Drawing Objection

Withdrawal of the objection to the Drawing FIG. 1 as not being labeled as "Prior Art" is requested. As acknowledged by the accompanying postcard receipt, a Substitute Drawing was filed and acknowledged by the USPTO on July 2, 2003, along with the Amendment filed on that date.

The Substitute Drawing, filed before the new USPTO Amendment Rules requiring use of "Replacement Drawing Sheets", shows Substitute FIG. 1 labeled as "(Background Art)", in consonance with the Examiner's requirement.

A copy of the postcard receipt, Substitute Drawing Transmittal, and Substitute Drawing Sheet are provided as attachments to this Response.

Acknowledgement and entry of the Substitute Drawing filed on July 2, 2003 is requested.

Procedural Deficiency of the Official Action

Applicant notes that the non-final Official Action fails to address the additional limitations encompassed by dependent claim 2, either by presenting art or argument.

For example, the limitation relating to the varistor is not addressed, i.e., "wherein the varistor is sized so as to extinguish the gas-discharge arrestor up to the maximum voltage of use", and the limitation relating to the parallel resistor, i.e., "wherein the resistor is sized so as to trigger the thermal disconnection of the over-voltage protection device at the minimum voltage of use" is also not addressed in any manner by the Examiner.

Accordingly, Applicant submits that, if a Notice of Allowability is not forthcoming in response to this communication, the only procedurally proper action would be another non-final Official Action, in accordance with the MPEP.

§103(a) Unpatentability Rejections

Withdrawal of the rejection of claims 1 and 2 under 35 U.S.C. §103(a) as being unpatentable over Applicant's Background Art (henceforth, "***ABA***") in view of Cole (US 4,491,723) is requested. ***The Examiner has not met his burden with respect to establishing a prima facie case of unpatentability.***

Not only does the suggested combination fail to teach or suggest all the claimed limitations, Applicant submits that a person with skill in the art would not be properly motivated to combine the references in the manner suggested by the Examiner, as discussed below.

Suggested Combination Lacks all Claimed Limitations

At the outset, Applicant notes that, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, ***the prior art reference must teach or suggest all the claim limitations.***[1] Further, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure.[2]

To reiterate the above case law and MPE, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.[3] All

[1] *See* MPEP §2143.
[2] *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) and *See* MPEP §2143.
[3] *In re Royka* 180 USPQ 580 (CCPA 1974).

words in a claim must be considered in judging the patentability of that claim against the prior art.[4]. When evaluating the scope of a claim, every limitation in the claim must be considered.[5]

The evidentiary record fails to teach each limitation of the invention claimed in either of claims 1 or 2.

As for particular claim limitations which are not found in the suggested combination, the applied art, taken alone or in combination, at least does not teach or suggest an over-voltage protection device suitable for protecting an electrical supply, which includes, among other features, "...a varistor and a thermal-fuse element arranged to ensure a thermal disconnection of the over-voltage protection device from the electrical supply...***wherein the over-voltage protection device includes, in parallel with the varistor, a resistor sized so as to cause, after a short-circuiting of the gas-discharge arrestor, a heating of the thermal-fuse element which triggers the thermal disconnection of the over-voltage protection device from the electrical supply***", as recited in independent claim 1.

Cole does not relate to the protection of an electrical supply from an over-voltage or voltage surge.

Instead, Cole discloses an over-current protection device used in a heating circuit applicable to the heating of a variety of objects, for example to pipe heating, soil warming, industrial process heating, ceiling heating, under floor heating and, in particular, to electrical blankets (see col.2, lines 42-52). Cole is submitted as more correctly relating to an ***over-current protection*** device, in particular to prevent over heating of an electric blanket due to excessive current, and not to voltage surge protection.

In accordance with Cole, resistor 7 is connected in series with a layer of PVC 4 of coaxial cable 1 and a thermal fuse F between input terminals 5 and 6 (see Fig.1, col.3, lines 43-45). In Figs. 2-5, resistor 7 is connected in series with the thermal fuse F, a heating conductor 2 of coaxial cable 1, and a diode D1 between the input terminals 5 and 6 (see col.3, lines 43-45).

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[4] *In re Wilson*, 165 USPQ 494 (CCPA 1970) and *see MPEP* § 2143.03.

More significantly, at least with respect to Applicants' claimed invention, neither Cole nor ABA shows a resistor in parallel with a ***varistor***. Cole FIG. 1 arguably teaches a resistor in parallel with ***heating conductor*** 2. The disclosure of Cole is silent on any teaching or suggestion of use of a varistor, and is further silent on any teaching or suggestion of use of a resistor in parallel with a varistor.

Further, ***Applicant's Background Art (ABA)*** is silent on any teaching or suggestion of a resistor in parallel with varistor 4 in ***ABA***.

Therefore, since the applied art, either alone or in combination, does not teach or suggest all the claimed limitations, the Examiner's burden to make a *prima facie* case of unpatentability has not been met. Reconsideration and allowance of claims 1 and 2 are requested.

No Motivation to Make the Suggested Combination

An essential evidentiary component of an obviousness rejection is a teaching or suggestion or motivation to combine the prior art references.[6] Combining prior art references without evidence of a suggestion, teaching or motivation simply takes the inventors' disclosure as a blueprint for piecing together the prior art to defeat patentability – the essence of hindsight.[7]

"There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art."[8] Further with regard to the level of skill of practitioners in the art, there is nothing in the statutes or the case law which makes "that which is within the capabilities of one skilled in the art" synonymous with obviousness.[9] The level of skill in the art cannot be relied upon to provide the suggestion to combine references.[10]

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[5] *In re Ochiai*. 37 USPQ2d 1127 (Fed. Cir. 1995) and *see MPEP* § 2144.08.
[6] *C.R. Bard, Inc. v. M3 Systems, Inc.*, 48 USPQ2d 1225 (Fed. Cir. 1998)
[7] *Interconnect Planning Corp. v. Feil*, 227 USPQ 543 (Fed. Cir. 1985)
[8] *See* MPEP §2143.01, citing *In re Rouffet*, 149 F.3d, 1350, 1357, 47 USPQ2d 1453, 1457-8 (Fed. Cir. 1998).
[9] *Ex parte Gerlach and Woerner*, 212 USPQ 471 (PTO Bd. App. 1980).
[10] *See* MPEP §2143.01, citing *Al-Site Corp. v. VSI Int'l Inc.*, 50 USPQ2d 1161 (Fed. Cir. 1999).

Still further, as the Federal Circuit has noted, "[a] ***reference is not available under 35 USC §103 if it is not within the field of the inventor's endeavor and was not directly pertinent to the particular problem with which the inventor was involved.***[11]

A technical problem has been acknowledged in conventional over-voltage protection devices, for example, the technical problem found and discussed in Applicant's Specification with respect to ***ABA***, i.e., conventional over-voltage protection devices can operate only at a given voltage of the electrical supply, or in a limited range of voltages.

The invention recited in claim 1 achieves a solution to this problem, the operation of which has previously been communicated in Applicant's amendment filed July 2, 2003, to which the Examiner's attention is again invited.

Cole is directed, at least in some aspects, to solving a problem in electric blankets of localized overheating along an elongate conductor, i.e., an elongate heating element. Cole is completely silent on voltage surge or over-voltage protection.

As mentioned above, Cole discloses a heating circuit applicable to the heating of a variety of objects, for example to pipe heating, soil warming, industrial process heating, ceiling heating, under floor heating, and in particular to electrical blankets. None of the suggested applications of the invention of Cole relates, even marginally, to a device suitable for protecting an electrical supply.

The only potential relation between the heating circuit disclosed by Cole and an AC power supply is that the AC power supply supplies power to the heating circuit (see col.3, lines 31-32). Applicant submits that this function has no implication with regard to the protection of the power supply against voltage transients.

Neither APA nor Cole did provide any motivation to combine an over-voltage protection device with an electric blanket.

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[11] *King Instrument Corp. v. Otari Corp.*, 226 USPQ 402 (Fed. Cir. 1985).

Further, it should be recalled that the technical problem solved by Applicant's claimed invention, arises ***only*** in a device in which a varistor and a gas-discharge arrestor are connected in series. Especially, the above problem stems from the requirement that the varistor must be able to extinguish the gas-discharge arrestor. This has been previously discussed in Applicant's amendment of July 2, 2003 (see, for example, page 5).

As mentioned in both Applicant's original Specification and in the Substitute Specification at paragraph 0019, for example, arranging the resistor in parallel with the varistor makes it possible to separate two functions: extinguishing of the gas-discharge arrestor, and triggering of the thermal disconnection. However, the idea of separating the two functions can be found only in the Applicant's disclosure, not in the ***ABA***, where both functions are fulfilled by the varistor, and not in Cole, where no gas-discharge arrestor or similar component can be found.

Hence, Applicant submits that a person skilled in the art would have no reasonable expectation to find a solution in Cole, which is silent with respect to a teaching or suggestion of a varistor, and a gas-discharge arrestor, or similar components.

Therefore, the person skilled in the art would not consult Cole for the purpose of improving the operating range of voltages of an over-voltage protection device.

Motivation is Available only by Use of Impermissible Hindsight

The rejections in the Official Action amount, in substance, to nothing more than improper hindsight reconstruction of Applicant's invention by relying on isolated teachings of the applied art, without considering the overall context within which those teachings are presented. Without benefit of Applicants' disclosure, a person having ordinary skill in the art would not know what portions of [***ABA*** or Cole] to consider, and what portions to disregard as irrelevant or misleading.[12]

[12] *In re Wesslau*, 147 USPQ 391, 393 (CCPA 1965).

Applicant respectfully suggests that it is impermissible within the framework of 35 U.S.C. §103 to pick and choose from any one reference only so much of it as will support a given position to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one skilled in the art.[13]

Since no varistor can be found in Cole, Cole can not teach or suggest connecting a resistor in parallel with a varistor. Since there is no resistor in ***ABA***, Applicant submits that the only possible motivation to combine a resistor (i.e., resistor 7 in Cole FIG. 1) in parallel with ***ABA*** varistor 4 results from the use of impermissible hindsight analysis by the Examiner. There is no motivational teaching in either ***ABA*** or Cole to add a resistor in parallel with a varistor, in particular to solve the technical problem addressed by Applicant's invention.

Hence, for a person skilled in the art who hypothetically attempts to modify an over-voltage protection device in accordance with ***ABA*** in such a way as to include resistor 7, no particular location of resistor 7 could be ascertained from the combination of Cole and APA, or either reference alone.

At least in view of the above widely disparate technical problems which are solved, respectively, by Applicant's recited invention and Cole, and in view of the remarks addressed to improper motivation due to hindsight reconstruction, Applicant submits that necessary and proper motivation for a person skilled in the art to combine ***ABA*** with Cole is lacking.

Conclusion

In view of the above, each of the presently pending claims 1 and 2 in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

In the event that the Examiner believes an interview would be helpful in resolving any outstanding issues in this case, the undersigned attorney is available at the telephone number

[13] *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.*, 230 USPQ 416 (Fed. Cir. 1986).

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indicated below.

Applicant believes no fee is due with this response other than fees for the accompanying Petition for a two (2) month extension of time. However, if other fees are due, please charge CBLH Deposit Account No. 22-0185, under Order No. 21482-00069-US from which the undersigned is authorized to draw.

Respectfully submitted,

By _____

Larry J. Hume
Registration No.: 44,163
CONNOLLY BOVE LODGE & HUTZ LLP
1990 M Street, N.W., Suite 800
Washington, DC 20036-3425
(202) 331-7111
(202) 293-6229 (Fax)
Attorney for Applicant

Attachments: Copy of Substitute Drawing Transmittal (1 page);
Copy of Substitute Drawing (1 page);
Copy of USPTO-stamped Postcard Receipt (1 page); and
Petition for Two (2) Month Extension of Time (1 page).

Due Date: July 7, 2003

Atty Docket No.: 21482-00069-US
Client Ref. No. :

Inventor: Michel Cantegrel

Application No.: 09/939,628-Conf. #4551 **Filing Date:** August 28, 2001
Title: OVERVOLTAGE-PROTECTION DEVICE

Documents Filed:

Amendment Transmittal (1 page)

Amendment Responsive to Final OA dated 05/07/2003 (8 pages)

Transmittal of Substitute Drawing (1 page)

Substitute Drawing (1 page)

Via:
Handling Atty: LJH/jdp **Date:** July 2, 2003
Client Contact: